

18. (New) The method of claim 16, wherein the matrix is selected from the group consisting of fibrous scaffolds, polymeric hydrogels, and micromachine or micromolded substrates.

19. (New) The method of claim 16, wherein the cells are selected from the group consisting of fibroblasts, tissue specific cells, progenitor cells, and stem cells.

20. (New) The method of claim 16, wherein the cells are genetically engineered to produce TSP-2.

21. (New) The method of claim 16, wherein TSP-2 is endogenous to the cells on the matrix and the cells are engineered to increase expression of TSP-2.

22. (New) The method of claim 16 wherein the cells are of a different cell type than the tissue that has proliferated.

23. (New) The method of claim 16 wherein the cells are selected based on natural production of TSP-2.

24. (New) The method of claim 1 wherein the cells are of a different cell type than the tissue that has proliferated.

25. (New) The method of claim 1 wherein the cells are selected based on natural production of the anti-angiogenic molecule.

26. (New) The method of claim 1 wherein the anti-angiogenic molecule is thrombomodulin.

27. (New) The method of claim 1 wherein the anti-angiogenic molecule is angiostatin.

28. (New) The method of claim 1 wherein the anti-angiogenic molecule is endostatin.

29. (New) The method of claim 1 wherein the anti-angiogenic molecule is TSP-1.--